

LIII.—On certain new Species of Coleoptera from Japan.

By GEORGE LEWIS.

WHILE recently compiling a catalogue of Japanese Coleoptera, I found in my cabinets a few new species, some of which are of more than ordinary interest; and I have therefore drawn out the following diagnoses with the object of clearing off old material before starting again to the East. As many authors have shown, the fauna of Nipon consists chiefly of species derived from the same source as those of Northern Asia and Europe; but it is in part made up also of genera from the tropics, together with a few from the New World. There is more connexion between the fauna of the south of Japan and the Philippine Islands and Borneo than with South China, so far as the researches of entomologists at present lead us; and this is illustrated in the well-marked genera *Nodynus*, *Xuthia*, *Ichthyurus*, *Ischalia*, and *Prionocerus*, noted here. And this is not surprising; for from South Japan, through to Formosa and thus on to Luzon, there is a series of small connecting islands not far distant from each other.

The *Necydalis* described below is of American type; and it is well to observe that the line of communication afforded by the Aleutian and Kurile Isles brings into Japan just such links from America as we might expect from a broken line of islands.

Formerly, perhaps, this line was less interrupted or even complete; but if so, it would appear from the paucity of analogous genera to have been connected only prior to the lifetime of existing races. There is one instance, worth recording, of an insect crossing the Pacific by this route; it is the ever-varying *Corymbites lateralis*, Leconte, the home of which is, I believe, Vancouver's Island. Then in the genus *Penthe*, the Japanese is allied to the American, not to the Javan species; and in the new genus of *Necrophaga* lately established by Dr. Kraatz, *Ptomascopus*, there are two species described from Japan and one from China; yet the second Japanese species is allied to an Amazon insect rather than to either of its fellows in Asia. These instances, which are, however, the exception and not the rule, could be extended considerably did space allow; but the general result would be left unchanged. It will be an interesting day for those who study the Eastern-Asiatic fauna when a good collection comes from Korea or Saghalien.

Tachycellus subditus, n. sp.

T. elongatus, subovatus, niger, nitidus; thorace distincte marginato,

basi sparsim punctato; elytrorum sutura marginibusque testaceo-rufis; tibiis tarsisque piceis, coxis rufis. L. $2-2\frac{1}{2}$ lin.

Easily known from *T. anchomenoides*, Bates, by its less convex form, smaller size, and the red sutures of the elytra, the striae of which are more lightly impressed.

Hab. Hiogo, very common in marsh lands.

Ptomascopus plagiatipennis, n. sp.

P. niger, subnitidus, undique punctatus; elytris singulatim plaga sanguinea notatis; abdomine, corpore subtus, pedibusque griseo-pubescentibus. L. 7 lin.

More robust than *P. morio*, Kraatz, with the punctuation larger and much more distinct, that of the elytra being of a somewhat larger grade than that of the thorax. The red blotch is broad, beginning near the apex of the scutellum, extending outwards to the edge of the elytra (leaving the suture black), and, then turning upwards, occupies half the base at the humeral angle: towards the apex there is a narrow streak of red filling the space between the carina and exterior margin.

Hab. Kagoshima; also Pekin.

Note.—I have a species of this genus from the Amazon river:—

Ptomascopus carbunculus, n. sp.

Niger, nitidus; capite subtiliter punctato; thorace elytrisque sparse subtilissime punctatis; subtus griseo-pubescentibus. L. $5-5\frac{1}{2}$ lin.

Nodynus leuco-fasciatus, n. sp.

N. oblongus, depressus, niger, nitidissimus, fronte punctulata; pronoto antice et ad latera grosse punctato, stria integra, margine laterali angustissimo, elevato; elytris striis distinctis punctiformibus, fasciis transversis medio albis; abdomine subtilissime punctato. L. 4 lin.

Broader than *N. nitidus*, C. Waterh., with acute angles to the thorax, which gradually widens to the base, where it is as wide as the elytra. The fascia is irregular, and, during life, white. Suture and antennae black, and the apex of the elytra truncate.

Hab. Yamato.

Scaphidium Reitteri, n. sp.

S. ovatum, piceum, nitidissimum; fronte, ore, thorace ad marginem et in medio late, elytrorum fasciis duabus, pygidio propygidioque rufescentibus; antennis basi piceis, articulo ultimo rufo.

Half the stature of *S. japonicum*, Reitter, with elytra more truncate, and the colour wholly different. I have much

pleasure in dedicating this insect to Herr E. Reitter, the well-known microcoleopterist of Paskau.

Hab. Hiogo, near Maiyasan temple.

Hister margine-punctatus, n. sp.

H. ovalis, subconvexus, niger, nitidus, stria frontali subsinuata; pronoto lateribus punctato, stria integra, margine subelevato, ante scutellum foveolato; elytris striis 1.-4. dorsalibus integris, 5. et 6. medio abbreviatis; propygidio pygidioque grosse sed parce punctatis; mesosterni lateribus parce punctatis. L. $2\frac{3}{4}$ lin.

Allied to the European *H. marginatus*, from which the larger size and system of striation easily separate it.

Hab. Hakodaté.

Hister simplicisternus, n. sp.

H. ovatus, niger, nitidus; fronte impressa, stria integra; pronoti stria laterali interna integra, externa abbreviata; elytris striis 1.-3. dorsalibus integris, 4. et 5. et suturali brevibus; propygidio punctato, subfoveolato; pygidio apice subtiliter punctato; mesosterno marginato, basi non sinuato. L. $2\frac{3}{4}$ -3 lin.

Much smaller than *sibiricus*, Mars., to which section it belongs; it may be recognized by the finer punctation of the pygidium (in some specimens almost smooth at the apex), and by the mesosternum having no notch to admit the prosternum.

Hab. Hiogo, where it is common.

Bacanius niponicus, n. sp.

B. ovalis, convexus, rufo-castaneus, undique sat dense punctatus; pronoti stria integra, linea basali arcuata e punctis paucis composita; elytris haud striatis; antennis pedibusque rufo-brunneis.

Near *B. rhombophorus*, Aubé, but half as large again; the punctures are coarser and more equally distributed; and the punctured line before the scutellum is a simple bow of twelve or thirteen points.

Hab. Nagasaki; under dead leaves at Suwosama temple in April.

Acritus komai, n. sp.

A. ovalis, convexus, piceus, nitidus, supra dense punctatus; pronoto linea basali punctorum transversa impresso; antennis pedibusque infuscatis.

Very near *A. minutus*, Herbst, and of the same stature, but more closely punctured, especially on the dorsal region. The

line of points before the scutellum is less defined, and extends transversely without any perceptible angle.

Hab. Nagasaki; from an old tree in May.

Xuthia niponia, n. sp.

X. elongata, cylindrica, opaca, rufo-testacea; capite haud grosse punctato; thorace grosse punctato, sulcis tribus longitudinalibus, inæqualibus, vix conspicuis notato; elytris striis angustissimis elevatis, interstitiis seriatim grosse punctatis. L. $1\frac{1}{4}$ lin.

The thorax is roughly punctate, with an uneven depression in the median region, and one on each side, rather more defined, running laterally. The sutural stria of the elytra is for about the basal fifth of the wing-case separated from the second stria by an interstice of the same width as the remainder; but nearer the apex it closes towards the suture, with which it then again runs parallel. It is smaller than any of Mr. Pascoe's species, as might be expected, from its northern locality.

Hab. Nagasaki.

Teredus politus, n. sp.

T. elongatus, cylindricus, niger, nitidus; capite thoraceque distincte punctatis; elytris striato-punctatis; antennis pedibusque rufis. L. $1\frac{3}{4}$ lin.

Shorter and broader than *T. nitidus*, F. Although the colour and punctuation of these two species do not materially differ, the Japanese one may hereafter form a new genus, the club of its antenna consisting of one large terminal ovate joint preceded by two small ones.

Hab. South Japan.

Macrodorcus Vanvolæmi, n. sp.

M. elongatus, parallelus, niger, subopacus; mandibulis capite vix longioribus, in medio unidentatis; clypeo transverso, medio prominulo; capite thoraceque subtilissime punctatis; abdomine subtus distincte punctato. L. 9 lin., mandib. ♂ $1\frac{3}{4}$.

Amongst Japanese species, allied to *M. opacus*, C. Waterh.; it is, however, more parallel, and the punctuation of the abdomen is general and distinct. The elytra are finely and clearly punctured on the disk and near the suture, the points at intervals assuming the form of irregular striæ; but at the outer sides the punctuation is deeper and more dense. The clypeus is raised to a point in the centre only, the outer angles being obtuse.

Hab. Yezo. Captured by M. Jean Van Volxem of Brussels.

Cetonia brevitarsis, n. sp.

C. breviter ovata, subnitida, cuprea, albo-variegata: *C. submarmoreæ* affinis. L. 9-10 lin.

The chief differences between this species and *C. submarmorea* are:—the clypeus is raised in front, but not notched; the whole outline is more quadrate; the punctation below the humeral angle more strigose, and the tarsi are both shorter and thicker. These points are very perceptible in a large series I have from South Japan, where it is very common. In colour it varies from blackish brass to a reddish coppery tint.

Hab. Nagasaki.

Cetonia insperata, n. sp.

C. ♀ oblonga, nitida, purpureo-ærea; elytrorum lineis transversis albis angustissimis, disco obsolete punctato; abdomine convexo, lævi. L. $9\frac{1}{2}$ lin.

Not closely allied to any species I know. The polished surface separates it from any Japanese species; the punctation of the elytra is comparatively obsolete; and the white markings are very narrow. The head is fairly punctured, and the edge of the clypeus slightly raised both in front and at the sides. The propygidium and pygidium have the strigose punctation of the preceding, but rather less deeply impressed. The outline of the insect viewed sideways between the lobe of the mesosternum and the apex of the elytra is concave.

Hab. Yezo.

Ichthyurus niponicus, n. sp.

I. fuscus; fronte depressa, flavo-testacea, capitis basi late nigra; thorace disco nigro, margine antice late, basi anguste flavo; elytris nigro-fuscis, marginibus externis flavis; antennis testaceis, apicem versus fuscescentibus; abdominis margine late flavo. L. $2\frac{3}{4}$ lin.

This species is the smallest yet observed in the genus, and possesses the usual colours. The large middle thigh is dusky at the joint; and the posterior leg has the tibia and half the thigh darkish; but the anterior leg is wholly pale.

Hab. Hiogo, foot of Maiyasan.

Ischalia patagiata, n. sp.

I. oblonga, depressa, nigra, parce albo-hirta; autennis pedibusque obscuro-nigris; elytris externe late luteo-marginatis. L. $2\frac{1}{2}$ -3 lin.

The yellow margin does not extend over the carina at the apex of the elytra, which are ribbed strictly to the pattern of *I. indigacea*, Pascoe. This species is rare; but I have found it in elevated sylvan districts both at Hiogo and Nagasaki in August.

Hab. South Japan.

Epicauta taishoensis, n. sp.

E. elongata, subparallela, nigra, subnitida, griseo-pubescent; capite thoraceque dense punctatis; elytris subopacis, dense rugoso-punctulatis. L. 7 lin.

The head is black, with a broad margin of red behind the eyes, which is narrowly interrupted in the centre before the neck. There is also a red spot on the forehead between the eyes; and the basal joint of the antennæ has a red patch in the middle, on the underside.

Near *E. flabellicornis*, Germ.; but in that European species the thorax is much more closely punctured. From *E. Gorhami*, Marseul (Japanese), it is separated by its wholly black thorax and elytra and the black surface behind the eyes.

Hab. Tsusima.

Prionocerus fuscipennis, n. sp.

P. obscuro-fuscus vel subæneo-metallicus; capite scutelloque obscuro-viridibus; thorace rufo; elytris thorace latoribus, postice subdilatis, carinulis vix distinctis, nigro-pubescentibus. L. 5 lin.

About the size of *P. cyanipennis*, Perty, from which it differs wholly in colour. The elytral nerves are furnished at intervals with long stiffish black hairs; and this seems a special character of this species.

Hab. Yokohama.

Leptura succedanea, n. sp.

L. ♀ nigra, elongata, vix nitida, brunneo-pubescent; thorace supra, elytris totis, tibiis in medio rubris.

This is the representative in Japan of the European *L. rubra*, L.; the chief differences are its bright colour, more slender figure, comparatively longer antennæ, blacker legs, and much finer punctation on the segments of the abdomen. I do not know the male.

Hab. North Nipon (*Van Volxem*).

Necydalis pennata, n. sp.

N. elongata, nigra, nitida, cinereo-tomentosa; capite punctato; oculis

prominulis; thorace disco lævi, ad basin punctato, scutello nigro; elytris rufescentibus vix grosse punctulatis; pedibus rufis. L. 6 lin.

The large head and prominent eyes of this species bring it near *N. mellita*, Say, to which, however, it has no very close resemblance. The tarsi are pitchy brown, as are also the lower portions of the hind tibiæ.

Litocerus Roelofsi, n. sp.

L. niger, griseo-pilosus; rostro ad basin capiteque sub oculis albo-pilosis; thorace in medio macula testacea traguliformi, subtus obscure testaceo; elytris testaceis, nigro-bifasciatis, fasciis marginalibus angustioribus albis; pedibus testaceo variegatis. L. $3\frac{1}{2}$ lin.

Black; rostrum behind the antennæ and a patch under the eyes pubescent white; thorax with a mesial arrow-shaped spot testaceous. The elytra are testaceous, with two beautiful fasciæ, irregular, and narrowly margined with white. There is also a black spot on each of the tubercles at the base, which is confluent with the narrow line of black occupying the base, and behind the humeral spot a small black isolated spot, the latter white-margined. Abdomen has the last five sections testaceous and immaculate. The first joint of each tarsus has a broad testaceous annulus, as has also each tibia.

Hab. Nagasaki, Iponmatzu, on the wax-tree (*Rhus succedanea*, L.).

Cassida erudita, Baly (1873), = *C. rugoso-punctata*, Motsch. (1866).

Cassida consociata, Baly (1873), = *C. fusco-rufa*, Motsch. (1866).

Episcapha hamata, n. sp.

E. elongata, subparallela, nigra, nitida; thorace subquadrato, antice leviter angustato, lateribus modice rotundatis, crebre subtiliter punctato; elytris obsoletius punctatis, annulo humerali integro, extus denticulato, ramum brevem emittente, fasciæque lata subapicali pallide fulvis. L. 6 lin.

Allied to *E. indica*, Crotch, but not so obsoletely punctured; it is also rather smaller and less convex. It is the only species from Japan at present with the isolated humeral spot.

Hab. Hakodaté.

Episcapha Gorhami, n. sp.

E. elongata, sublævis, nigra, crebre fortius punctata; thorace subopaco, antice angustato, lateribus fere rectis, medio obsolete bi-
Ann. & Mag. N. Hist. Ser. 5. Vol. iv. 33

impresso; elytris sat convexis, annulo humerali fere integro, extus bidentato, ramum unidentatum emittente, fasciaque denticulata subapicali rubris. L. 6 lin.

This species comes into the *E. vestita* group; but it is not pubescent, and is more clearly punctured than any of its allies. The denticulations of both the humeral annulus and the apical lunular fascia are of the pattern of *E. Fortunei*, Crotch; but the form and punctuation are very different. I have much pleasure in dedicating this species to my friend the Rev. H. S. Gorham.

Hab. Yezo.

Coccinella Crotchii, n. sp.

C. niger, subnitidus, punctatus; capite maculis duabus flavis notato; prothoracis margine anteriore angusto, flavo; elytris basi (sutura excepta) late flava, ante apicem singulatim flavo maculatis; pedibus anterioribus flavis. L. 2 lines.

The type of this species has two pale spots on the head; but in a series these spots are often confluent, or the head wholly flavous. I do not observe greater variations. The anterior margin of the thorax is pale; and the angles being wholly so, give an appearance of greater breadth in that region. There is a broad margin of yellow colour at the base of the wing-case (suture black), and a patch just before the apex, the last not touching the edge of either elytron.

Novius concolor, n. sp.

N. niger, subnitidus, undique subtilissime punctatus; griseo-pubescent; thorace elytrisque totis rufis.

Half as large again as *N. limbatus*, Motsch., from which it may be known by its red thorax, scutellum, and elytra.

Hab. Hiogo, Maiyasan temple, from which I possess a series.

NOTE.—I am indebted to Mr. H. W. Bates for the following descriptions of two new Japanese Longicorns in his collection:—

Saperda tetrastigma.

S. punctata affinis; nigra, griseo-pubescent, supra griseo-fulva, nigro-setosa; capite maculis duabus, thorace quatuor, elytris utrinque quatuor lineatim digestis nigris; antennis articulis 3. et 4. et 6.–11. basi griseis. Long. $6\frac{1}{2}$ lin. ♂.

Of similar form to *S. punctata*, but rather less narrowed posteriorly. The head is broader and the forehead strongly

transverse and plane. The elytra are rounded at the apex, and the sides are not abruptly vertical. The whole upper surface is clothed with short, erect, dusky bristles. The colour above is greyish tawny, with the following rounded black spots—one in the middle of the forehead and one on the occiput, four in quadrangle on the disk of the thorax (besides one on each flank), and four on each elytron, placed in a line from the shoulder to near the apex, the apical one being much the smallest. The under surface, legs, and antennæ are black, clothed with fine grey pile, the base of the third to the eleventh joints (with the exception of the fifth) being grey.

Japan. From the collection of the late Mr. W. W. Saunders.

Glenea chrysochloris.

S. Swinhoei affinis, at differt corpore metallico-squamoso. Subgracilis, nigra, squamulis argenteo-viridibus dense vestita, et passim nigro-setosa; thorace maculis duabus elongatis medianis alteraque minore laterali nigris; elytris utrinque maculis duabus angulatis alteraque postica C-formi nigris. Long. $7\frac{1}{2}$ lin. ♂ ♀.

Differs from the allied *G. Swinhoei* by the metallic-coloured clothing of the body. In this respect it agrees with the East-Siberian *G. metallescens* (*Saperda id.*, Motsch.), from which its large black markings conspicuously distinguish it. The elytral spots are, on each side two large and angular, placed in succession on the disk before the middle, and one describing nearly an oval between the middle and the apex; the shoulders and lateral carinæ of the elytra are also black. The elytra are briefly truncated at the apex, with a short tooth at the external angle of the truncature. The apex of the tibiæ is black, the tarsi above pale blue. The antennæ are black, with the basal joints more or less marked with blue.

Yezo; on elm trees. Taken by M. Jean Van Volxem (coll. H. W. Bates and G. Lewis).

PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

November 5, 1879.—Henry Clifton Sorby, Esq., F.R.S.,
President, in the Chair.

The following communications were read:—

1. "On the Fish-remains found in the Cannel Coal in the Middle Coal-measures of the West Riding of Yorkshire, with the description of some new Species." By James W. Davis, Esq., F.G.S., &c.

The remains described by the author were from a bed of Cannel